

Steerman Load Moving Systems

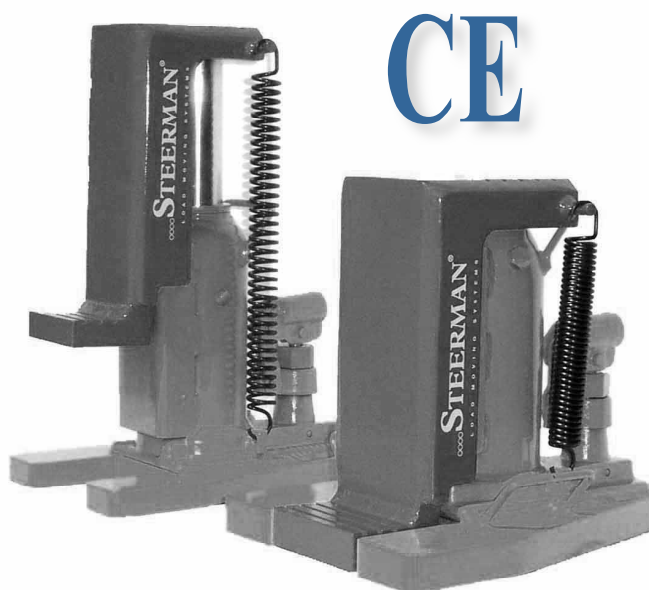
“Lifting Loads the Professional Way”

Operating Instructions for Hydraulic Toe Jacks

Model: HTJ-3 Capacity 3t

Model: HTJ-6 Capacity 6t

Model: HTJ-10 Capacity 10t



**Before attempting to use this equipment please
ensure that you read and fully understand the
correct operating procedures.**

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Manual part number 13120-6 & 13200-6 for models HTJ-6 and HTJ-10

INTRODUCTION

Thank you for purchasing Steerman HTJ Hydraulic Toe Jacks, which if maintained and operated correctly will provide many years of trouble free service

Please ensure that these instructions are made available to all those who will operate or maintain the jacks.

For your personal safety, please read and fully understand the information contained within.

The owner/operator shall have an understanding of this product and its correct operation before attempting to use the jack.

The owner/operator must understand the inherent dangers associated with the use and misuse of this type of product.

If any doubt arises as to the safe and proper use of this product as outlined in this manual, remove from service until such time as it is clear.

Inspect the jack before use and report any defects immediately to the person responsible for the maintenance.

Do not use if any of the following is evident, oil leaks, bent cracked or broken components.

If the jack has been, or is suspected of being subjected to shock loading, discontinue use until the unit has been checked by a qualified person or returned to the manufacturer or his authorised agent for investigation.

Owners/operators of this equipment need to be aware that the use and subsequent repair of this equipment may require special training, knowledge and test equipment.

It is recommended that jacks undergo annual inspection by a qualified person and that any damaged or missing parts, decals, warning labels or safety signs be replaced by factory approved genuine **Steerman** replacement parts only.

Any Jack that appears to be damaged in any way, is worn or operated abnormally should be removed from service immediately until such time as permanent effective repairs can be made.

WARNING!
ALWAYS READ AND FULLY UNDERSTAND
THE CORRECT OPERATING
PROCEDURES PRIOR TO USE

PRODUCT DESCRIPTION

Steerman Hydraulic Toe Jacks are designed for lifting, but not sustaining, loads ranging from 6,000kg thru 10,000kg depending upon the rated capacity of the jack. The jack can be used vertically or, in certain circumstances, angled to a maximum of 5 degrees from the vertical position.

After lifting, the load must immediately be supported by appropriate means. Each Steerman Toe Jack model is suitable for use in an appropriately rated and designed vertical bench press structure. These jacks **ARE NOT** recommended for use in lifting or positioning of housing/buildings.

SPECIFICATIONS

Model	Capacity Kg	Base Size L x W	Lifting Range- Toe	Lifting Range- Head
HTJ-3	3,000	151 x 110mm	16 x 146mm	230 x 360mm
HTJ-6	6,000	280 x 190mm	22 x 172mm	268 x 420mm
HTJ-10	10,000	295 x 230mm	29 x 159mm	280 x 410mm

BEFORE USE

1. Verify that the product and the application are compatible; if in doubt call your authorised **Steerman Distributor** for further advice.
2. Before using this product, read the operating instructions thoroughly and familiarize yourself with the product and the hazards associated with its improper use.
3. Open the release valve (counter clockwise no more than 2 full turns).
4. Check to ensure that the jack pump operates smoothly prior to putting into service.
5. Inspect the unit before each use. Do not use if leaks, cracked, bent or damaged components are evident.

OPERATION

Lifting

1. Assemble the 3-piece handle, ensuring that the spring clips are correctly engaged in the respective slots.
2. Secure the load to prevent inadvertent shifting and movement.
3. Ensure that the base on which the jack will be placed is suitable to take the loading being imposed. The base must be level and firm.
4. Position the jack near the desired lifting point and always ensure that you follow any manufacturer's instructions regarding the correct lift points and methods applied to machinery.
5. Close the release valve by turning clockwise until it is positively closed.
6. Raise the load to the desired height and immediately transfer the load to appropriately rated support devices such as jack stands.

CAUTION!

USE THE HANDLE PROVIDED WITH THIS PRODUCT OR A GENUINE STEERMAN REPLACEMENT HANDLE TO ENSURE PROPER RELEASE VALVE OPERATION. DO NOT USE EXTENSION BARS/TUBING ON THE HANDLE.
WHEN USING THE JACK TO LIFT A VEHICLE, LIFT ONLY ON THE RECOMMENDED LIFT POINTS AND IN ACCORDANCE WITH THE MANUFACTURER'S PUBLISHED GUIDELINES. **ALWAYS USE JACK STANDS TO IMMEDIATELY SUPPORT ANY LOAD AFTER LIFTING.**

WARNING!

STUDY, UNDERSTAND AND FOLLOW ALL INSTRUCTIONS BEFORE OPERATING THIS DEVICE.
DO NOT EXCEED THE RATED CAPACITY.
USE ONLY ON FIRM LEVEL SURFACES.
IMMEDIATELY AFTER LIFTING, SUPPORT THE OBJECT WITH APPROPRIATELY RATED SUPPORTS.
ALWAYS WEAR THE APPROPRIATE SAFETY CLOTHING AND EQUIPMENT WHEN OPERATING THIS EQUIPMENT.
FAILURE TO READ AND HEED THESE WARNINGS COULD RESULT IN PERSONAL INJURY AND/OR EQUIPMENT DAMAGE

Lowering

1. Raise load just enough to remove the support device/s.
2. Place the handle onto the release valve and slowly turn handle counter clockwise, but no more than a ½ turn. If the load fails to lower, carefully transfer the load to another lifting device and jack stands. Carefully remove the affected jack and the jack stands, lower the load, again by slowly turning the release valve no more than a ½ turn.
3. After removing the jack from under the load, fully open the release valve returning the cylinder to the fully closed position, this prevents ingress of debris to the cylinder and pump.

CAUTION!

ENSURE THAT ALL PERSONNEL AND TOOLING ARE CLEAR BEFORE LOWERING THE LOAD. DANGEROUS DYNAMIC SHOCK LOADS ARE CREATED BY QUICKLY OPENING AND CLOSING THE RELEASE VALVE AS THE LOAD IS BEING LOWERED. THE RESULTING OVERLOAD MAY CAUSE HYDRAULIC SYSTEM FAILURE, WHICH COULD CAUSE SEVERE PERSONAL INJURY AND OR EQUIPMENT DAMAGE.

MAINTENANCE

IMPORTANT: Use only the recommended grade of hydraulic oil such as **Mobil DTE 13**. Avoid mixing different types of fluid. NEVER use brake fluid, turbine oil, automatic transmission fluid, motor oil or glycerine.

Improper fluid can cause premature failure of the jack and the potential for sudden and immediate loss of load.

ADDING OIL

1. With the cylinder fully lowered and the pump piston fully closed, set the jack in its upright position on a level surface. Remove the oil filler plug/screw.
2. Fill until the oil is level with the filler plug/screw hole; reinstall oil filler plug/screw ensuring that all excess oil is thoroughly wiped clean from the jack body.

CHANGING OIL

For the best performance and prolonged service life, **replace the hydraulic oil at least once a year** using the correct grade as noted under the heading **MAINTENANCE**.

1. With the cylinder fully closed and the pump piston fully closed, remove the filler plug/screw.
2. Lay the jack onto its side and drain the fluid into a suitable container.
3. **NOTE:** All oils should be disposed of correctly and not poured into any drainage systems. Check with your local authorities to ensure the correct procedure for disposal
4. Fill with the correct grade of hydraulic oil (Mobil DTE 13 recommended) or a suitable equivalent.

LUBRICATION

1. A coating of light lubricant oil should be applied to all pump pivot points ensuring that all linkages operate freely.
2. Periodically check the pump piston and cylinder ram for signs of corrosion, pitting and damage. Clean as needed and wipe with a lint free oily cloth.
3. **NEVER USE ABRASIVE PAPERS OR OTHER ABRASIVE MATERIALS ON THESE SURFACES.**
4. Periodically remove the toe fabrication and apply a thin film of grease to the inner face of the toe and the mating face on the cylinder support plate.
5. When not in use, store the jack with piston pump and cylinder fully closed.

TROUBLE SHOOTING

Symptom	Possible Causes	Corrective Actions
Jack will not lift the load	Release valve not tightly closed	Ensure release valve is tightly closed
	Overload condition	Remove the overload condition
Jack will not hold pressure	Release valve not tightly closed	Ensure release valve is tightly closed
	Overload condition	Remove the overload condition
	Hydraulic unit malfunction	Contact Steerman Technical Services
Jack will not lower after unloading	Reservoir overfilled	Drain fluid to the correct level
	Pump linkages binding	Unload, clean and lubricate moving parts
Poor lift performance	Low fluid level	Ensure correct fluid level
	Air trapped in system	With ram fully retracted, remove oil filler plug/screw to let pressurised air escape from the reservoir, reinstall the filler plug/screw
Jack will not lift to full extension	Low fluid level	Ensure correct fluid level

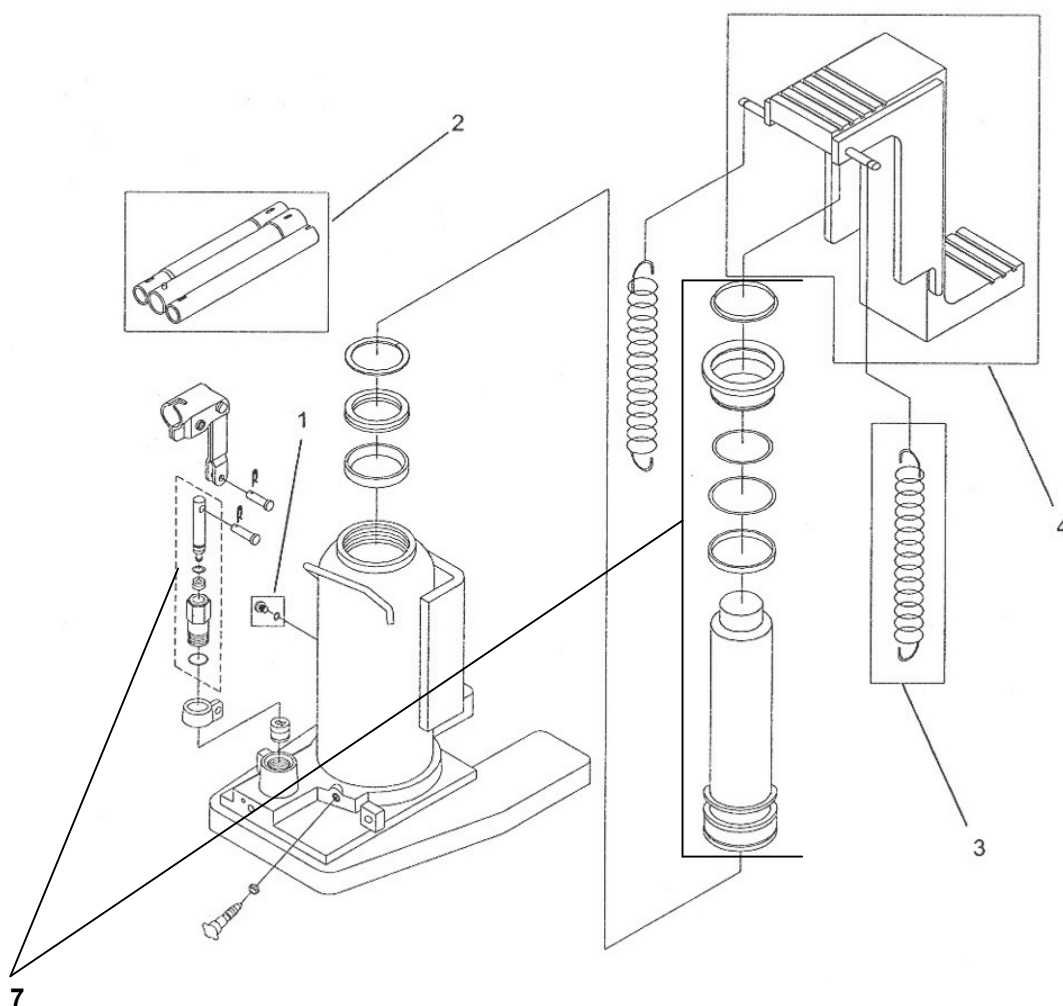
REPLACEMENT PARTS (See the enclosed exploded drawing on page 6)

When ordering replacement parts, please refer to the model number/serial number found on the product, then give the part number and description.

Available Parts: Please refer to the parts diagram when ordering parts. Not all components of the jack are replaceable items, but may be illustrated for reference of location and position in the overall assembly sequence. When ordering replacement parts, always provide: model number, serial number and a full description of the parts required together with the respective part numbers. Call your authorised Steerman distributor for further details.

Item No	Description	Qty	HTJ-3	HTJ-6	HTJ-10
1	Oil filler plug/screw	1	13060-01	13120-01	13200-01
2	Handle assembly	1	13060-02	13120-02	13200-02
3	Return spring	2	13060-03	13120-03	13200-03
4	Toe fabrication	1	13060-04	13120-04	13200-04
5	Warning label not shown)	1	13060-05	13120-05	13200-05
6	Operation/parts manual	1	13060-06	13120-06	13200-06
7	Repair kit pump and cylinder	1	13060-07	13120-07	13200-07

Please Note! The repair kit for each model contains all rubber/plastic seals, bushings and steel balls necessary to carry out a full repair to both cylinder and pump.



**Replacement Parts Illustration for Steerman Hydraulic Toe jacks
Models HTJ-3, HTJ-6 and HTJ-10**

Please ensure you supply model type/number, serial number and a full description of the parts and part numbers when placing an order. Fax or telephone your parts order to your authorised Steerman Distributor.